

DETAILED ACTION

Response to Amendment

This office action is responsive to the amendment filed on 03/21/2011. As directed by the amendment: claims 1, 3, 7 and 9, have been amended, claims 2 and 4 have been cancelled, and new claims 10-12 have been added. Thus, claims 1, 3, 7 and 9-12 are presently pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 7 and 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "a flow path for at least temporary ventilation of the container" in lines 12-13. Claim 1 recites "the seal...so as to close the flow path to prevent ventilation of the container through the flow path" in lines 31-33. It is unclear as to whether or not the container is ventilated.

Appropriate correction required.

Claim 3 recites the limitation "the dispenser pack according to claim 2" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

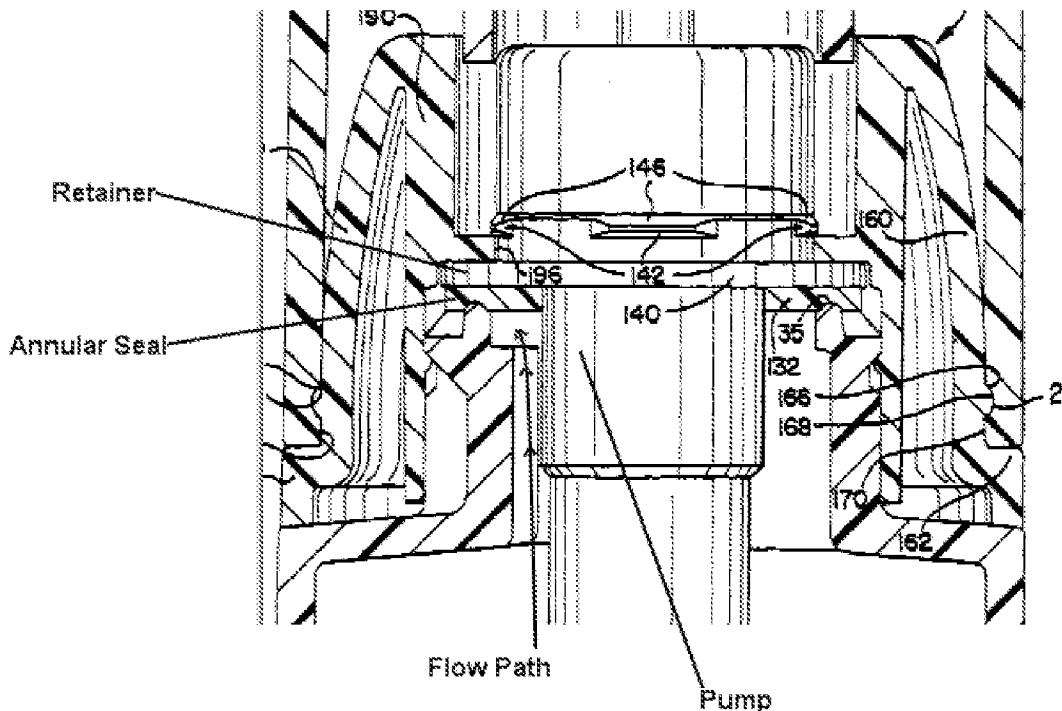
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia (EP1 050 481) and Nomoto et al. (US 6,266,943) in view of Stone (US 4,322,020).

Regarding claims 1, 3, 9 and 10, as best understood Garcia discloses a dispenser pack including a “standard metering pump,” a container 24 having a neck 32, a closing cap 130, a cylindrical wall 190 that encloses an axial aperture 192 that is arranged above an internal flange 196 (see marked-up portion of fig. 3); a retainer 140

for attaching the pump within the aperture 192 of the closing cap 130, wherein an exterior flange of the retainer 140 can be pressed against an annular seal 132 on an outer face of the container neck 32 so as to be sealed by the closing cap 130; a pump housing including a pump cylinder 141 that surrounds a pump chamber whose upper end includes an aperture and whose lower end includes a suction pipe nipple freely exposed (see figures 2 and 3); and a piston shaft 148 which protrudes outward from the pump chamber and at its outer end includes an activation head 16 (see figure 2). Garcia further discloses that the volume of the container 24 that contains the free-flowing medium can be adjusted to the decrease of the volume of the free-flowing medium to be dispensed from the container 24; and a inner hole rim of the seal 132 forms an annular lip resting against the outside of the pump housing 141 so as to close a flow path formed between the retainer 140 and pump (see marked-up portion of fig. 3).



Marked-up portion of Fig. 3

With further respect to claims 1, 3, 9 and 10, Garcia discloses all the elements of the claimed invention except the seal being pressed radially inward in the form of a truncated cone across an annular space in the flow path against the cylindrical outside of the pump housing so as to seal the flow path, wherein the thickness is reduced towards the outer end of the annular lip; and the flow path providing at least temporary ventilation of the container.

Nomoto teaches a dispenser pack including a retainer 424; a pump; and an annular seal (F) on an outer face of the container neck 405 (see fig. 35), wherein the thickness of the seal is reduced towards the outer end of an annular lip 435a (fig 36). Nomoto discloses the seal (F) pressed radially inward in the form of a truncated cone

across an annular space in a flow path against the cylindrical outside of the pump housing 421 in order to seal the flow path, wherein the container (D) is capable of ventilation via the flow path, releasing compressed air within the product container 402 when the inner pressure rises during pump installation (see figures 36, 37 and column 31, lines 34-44).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the device of Garcia with a seal being in the form of a truncated cone across an annular space in the flow path against the cylindrical outside of the pump housing, wherein the thickness is reduced towards the outer end of the annular lip; and the flow path providing at least temporary ventilation of the container, as taught by Nomoto, in order to provide a tight seal preventing the entrance of air therethrough, while capable of releasing compressed air within the container when the inner pressure rises during pump installation.

Regarding claim 11, Garcia discloses all the elements of the claimed invention except the medium within the container being enclosed by a bag made of a flexible material, with an upper aperture rim of the bag being tightly connected to the wall of the container, while in a space between the inside of the container wall and the outside of the bag air at atmospheric pressure is contained.

Nomoto teaches a dispenser pack including a container (D) having an interior with variable volume wherein the container medium is enclosed by a bag 402 made of flexible material allowing the bags volume to reduce as product is pumped out the container (D; see figs 34 and 45; and col. 24, lines 1-6); with an upper aperture rim of

that bag 402 being tightly connected to the wall of the container (D; see fig. 35); while in a space between the inside of the container wall and the outside of the bag air at atmospheric pressure is contained (i.e. via opening 406; see figs. 34 and 35).

Thus, a person of ordinary skill has good reasons to pursue the known options or finite number of solutions, i.e. a container including a flexible bag as suggested by Nomoto, or a container including a follower piston, for the predictable result of providing a container whose interior volume reduces in conjunction with the dispensing of the product, since the finite number of options are within the technical grasp of a person of ordinary skill in the art.

With further respect to claim 1, the combination of Garcia and Nomoto discloses all the elements of the claimed invention but is silent to the teaching of the inner structure of the pump.

Stone teaches a dispenser pack having an interior with variable volume wherein the container 6, 26 medium is enclosed by a bag 2, 9 made of flexible material allowing the bags volume to reduce as product is pumped out the container including: “a standard metering pump” 3, having a pump housing with a pump cylinder that surrounds a pump chamber 30 (see fig. 3); a pump piston arranged in the pump chamber 30 so as to be slidable in a sealed manner (fig. 3), and includes a piston shaft 18 which protrudes outward from the pump chamber 30 and at its outer end includes an activation head 16; an axial outlet channel that extends through the piston shaft 18 and the pump piston and connects the pump chamber 30 to a dispensing aperture of the activation head 16 (fig. 3); an inlet valve 21 and an outlet valve 19 for the free-flowing medium; and a

helical compression spring 23 which impinges on the pump piston in the direction of its home position (see figure 3 and column 5, lines 21-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the pump of Garcia to include inner structure, as taught by Stone, in order to extract the fluid product from the container for dispensing.

Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia (EP1 050 481) and Nomoto et al. (US 6,266,943) in view of Stone (US 4,322,020) as applied to claims 1, 3 and 9-11 above, further in view of Meshberg (US 4,008,830).

Regarding claim 12, the combination of Garcia, Nomoto and Stone discloses all the elements of the claimed invention except the bag having an upper aperture rim forming a one piece construction with a wall of the container.

Meshberg teaches a dispenser pack wherein the medium within the container is enclosed by a bag made of a flexible material (figs 1, 3 and 4), wherein the bag has an upper aperture rim forming a one piece construction with a wall of the container to avoid the necessity of inserting a flexible bag upon assembly (see figure 4 and column 5, lines 10-15).

Thus, one of ordinary skill in the art would recognize that the known option of forming the bag having an upper aperture rim forming a one piece construction with a wall of the container, as taught by Meshberg, involves only routine skill in the art, for the

predictable result of facilitating assembly, avoiding the necessity of inserting a flexible bag upon assembly.

Regarding claim 7, it is noted that the method of forming the device “i.e. injection-molded” is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. See MPEP 2113.

Response to Arguments

Applicant's arguments submitted under “Remarks” in the response filed on 03/21/2011 have been fully considered but are moot in view of the new rejections made in this action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT NICHOLS II whose telephone number is (571)270-5312. The examiner can normally be reached on Mon-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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